a. Create a XMLHttpRequest with a callback function and retrieve data from a TXT file by using AJAX

Step-1: Create a html page

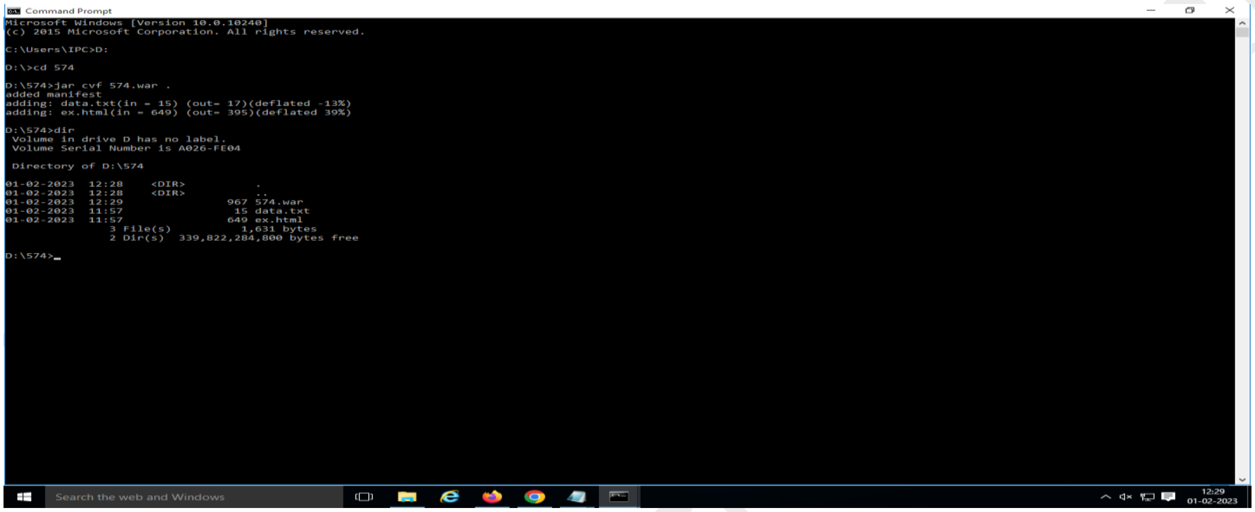
ex.html

```
<!DOCTYPE html>

<html>

<head>

<title>XMLHttpRequest Example Program</title>

<script>

        function getTextFile(){

                // Creating the XMLHttpRequest object

                const xhttp = new XMLHttpRequest();

                xhttp.open("GET","txt.txt");

                xhttp.onreadystatechange = function()

                {

                        // Check if the request is complete and was successful

                        if(this.readyState === 4 && this.status === 200)

                        {

                                // Inserting the response from server into an
                        HTML element

                        document.getElementById("disp").innerHTML =
                        this.responseText;
                }};
                xhttp.send(); // Sending the request to the server
        }
</script>
</head>
<body>
        <h1>The XMLHttpRequest Object</h1>
        <p>Create a XMLHttpRequest with a callback function and retrieve data from a TXT file by using AJAX.</p>



        <button onclick="getTextFile()">Click Here to Get the Data From Text File</button>
        <p id="disp"></p>
</body>
</html>
```

Step-2 : Create data**.**txt file with some data in it.

Step-3 : To run, this file create a .war file using the following command

$ jar cvf 574.war .



```
Microsoft Windows [Version 10.0.10240]
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C:\Users\IPC>D:

D:\>cd 574

D:\574>jar cvf 574.war .
added manifest
adding: data.txt(in = 15) (out= 17)(deflated -13%)
adding: ex.html(in = 649) (out= 395)(deflated 39%)

D:\574>dir
 Volume in drive D has no label.
 Volume Serial Number is A026-FE04

 Directory of D:\574

01-02-2023  12:28    <DIR>          .
01-02-2023  12:28    <DIR>          ..
01-02-2023  12:29               967 574.war
01-02-2023  11:57                15 data.txt
01-02-2023  11:57               649 ex.html
               3 File(s)          1,631 bytes
               2 Dir(s)  339,822,284,800 bytes free

D:\574>_
```
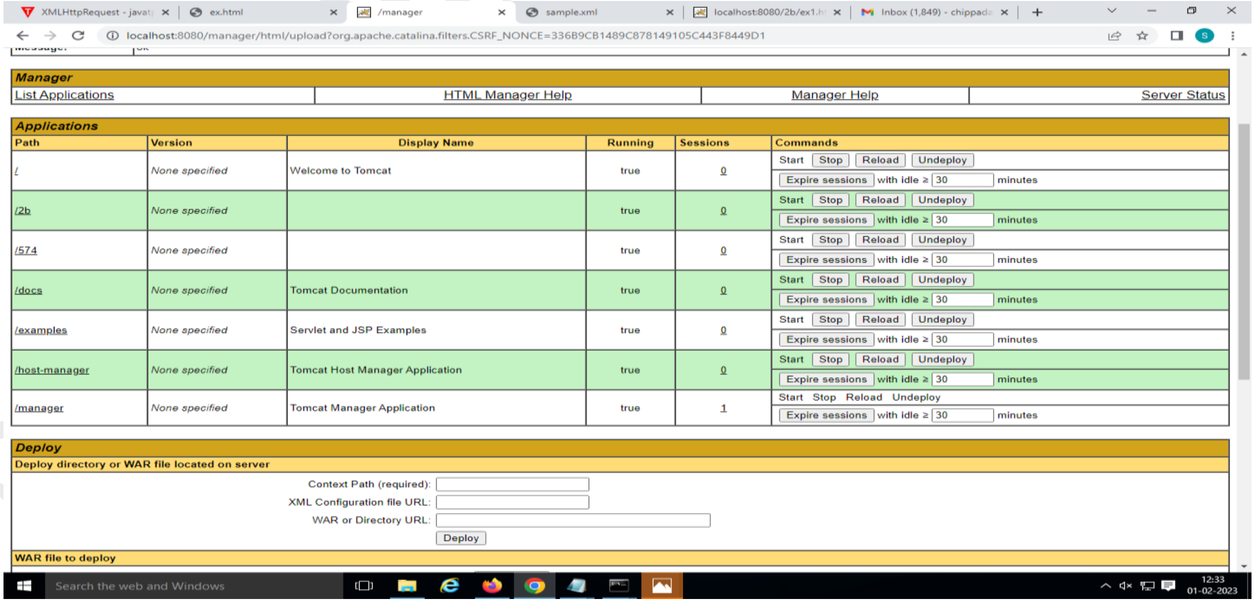

Step-4: Choose war file and deploy



localhost:8080/manager/html/upload?org.apache.catalina.filters.CSRF_NONCE=336B9CB1489C878149105C443F8449D1

Manager

List Applications	HTML Manager Help	Manager Help	Server Status

Applications

Path	Version	Display Name	Running	Sessions	Commands
/	None specified	Welcome to Tomcat	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/2b	None specified		true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/574	None specified		true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/docs	None specified	Tomcat Documentation	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/examples	None specified	Servlet and JSP Examples	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/host-manager	None specified	Tomcat Host Manager Application	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/manager	None specified	Tomcat Manager Application	true	1	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes

Deploy

Deploy directory or WAR file located on server

Context Path (required):

XML Configuration file URL:

WAR or Directory URL:

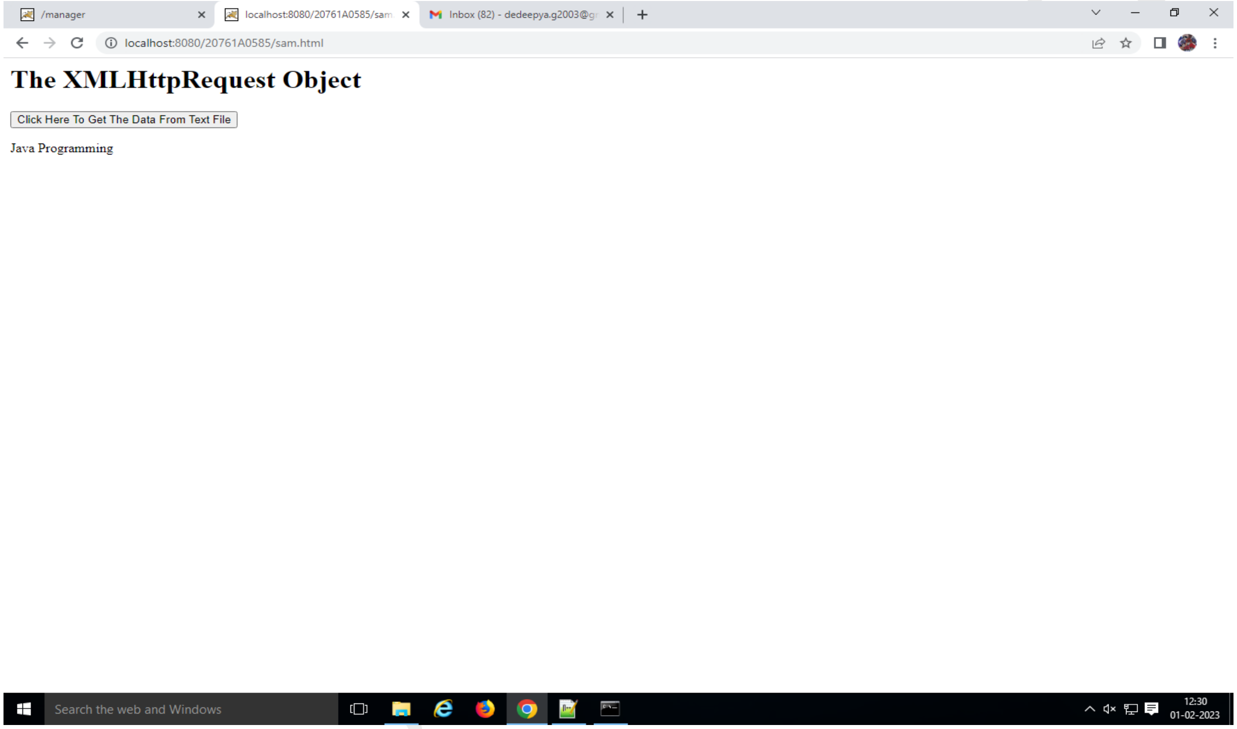
Deploy

WAR file to deploy

Step-5:Execute the html files

http://172.16.10.31:8080/574/ex.html

Output:


/manager
localhost:8080/20761A0585/sam
Inbox (82) - dedeepya.g2003@g
localhost:8080/20761A0585/sam.html
Search the web and Windows
12:30
01-02-2023

The XMLHttpRequest Object

Click Here To Get The Data From Text File

Java Programming

b) Create an XMLHttpRequest to retrieve data from an XML file and display the data in an HTML table by using AJAX.

Steps:

1.Create an xml file

```
<bookstore>
        <book category="Programming">
                <title>Java Programming</title>
                <author>James Gosling</author>
                <year>1990</year>
                <price>$25</price>
        </book>
        <book category="DateBase">
                <title>DateBase Management System</title>
                <author>Elmasri</author>
                <year>2002</year>
                <price>$35</price>
        </book>
</bookstore>
```

2.Create a html file

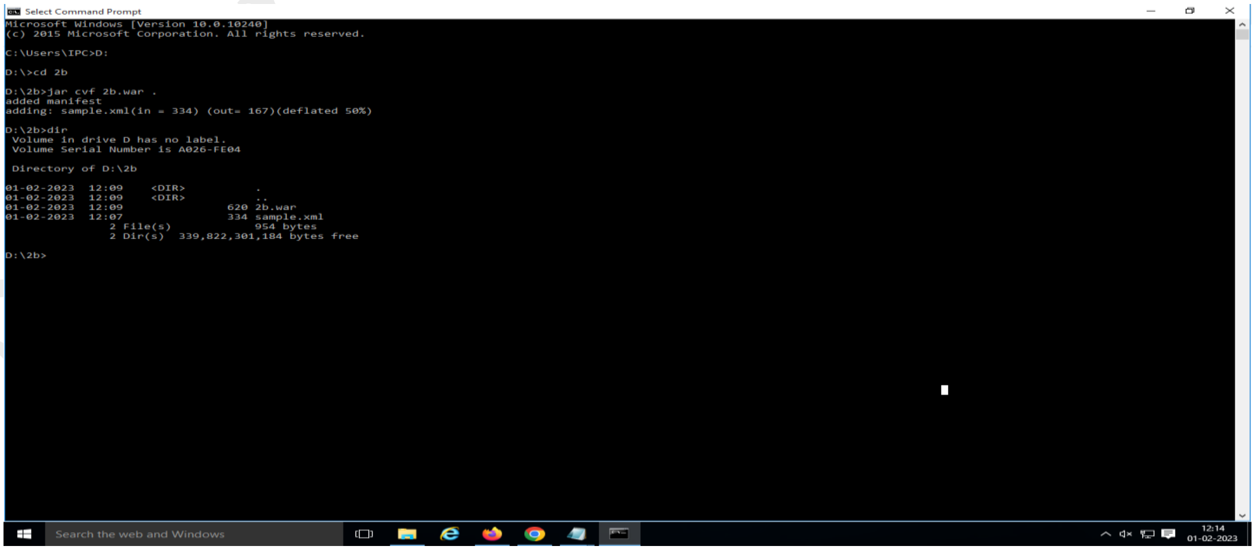
ex1.html

```
<!DOCTYPE html>
<html>
<head>
        <title>2B Program</title>
<script>
        function loadDoc() {
                // Creating the XMLHttpRequest object
                const xhttp = new XMLHttpRequest();
                xhttp.onreadystatechange = function () {
                        // Check if the request is complete and was successful
                        if (this.readyState === 4 && this.status === 200) {
                        myFunction(this);
                }
        };
        xhttp.open("GET", "web.xml", true);
        xhttp.send(); // Sending the request to the server
        }
        function myFunction(xml) {
                var xmlDoc = xml.responseXML;
                var x = xmlDoc.getElementsByTagName("title");
                var y = xmlDoc.getElementsByTagName("author");

                var z = xmlDoc.getElementsByTagName("year");

                var u = xmlDoc.getElementsByTagName("price");

                var i = 0;

                var len = x.length;

                document.write("<center><h2>Books Details</h2></center><br>");

                document.write("<center>");

                document.write("<table border=1 width=70% text-align= center;>");

                document.write("<tr bgcolor =#5D7B9D >");

                document.write("<th >Book
        Name</th><th >Author</th><th>Year</th><th

                >price</th>")

                document.write("</tr>");

                for (i; i < len; i++) {

                document.write("<tr>");

                document.write("<td>" + x[i].childNodes[0].nodeValue + "</td>");

                document.write("<td>" + y[i].childNodes[0].nodeValue + "</td>");

                document.write("<td>" + z[i].childNodes[0].nodeValue + "</td>");

                document.write("<td>" + u[i].childNodes[0].nodeValue + "</td>");

                document.write("</tr>");

        }

        document.write("</table>");

        document.write("</center>"); document.write("<style>");

        document.write("table,td,th{border:1px soild;padding:20px}");
```

```
        document.write("table{text-align:center;}"); document.write("</style>");

        }

</script>

</head>

<body>

        <h1>The XMLHttpRequest Object of Books Details</h1>

        <p> Create an XMLHttpRequest to retrieve data from an XML file and
        display the data in an HTML

        table by using AJAX

        </p>

        <button onclick="loadDoc()">Click Here to Get the Data From XML
        File</button>

        <p id="disp"></p>

</body>

</html>
```

3.Create .war file

--> **jar cvf 2b.war .**



```
Microsoft Windows [Version 10.0.10240]
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C:\Users\IPC>D:

D:\>cd 2b

D:\2b>jar cvf 2b.war .
added manifest
adding: sample.xml(in = 334) (out= 167)(deflated 50%)

D:\2b>dir
 Volume in drive D has no label.
 Volume Serial Number is A026-FE04

 Directory of D:\2b

01-02-2023  12:09    <DIR>          .
01-02-2023  12:09    <DIR>          ..
01-02-2023  12:09               620 2b.war
01-02-2023  12:07               334 sample.xml
               2 File(s)            954 bytes
               2 Dir(s)  339,822,301,184 bytes free

D:\2b>
```
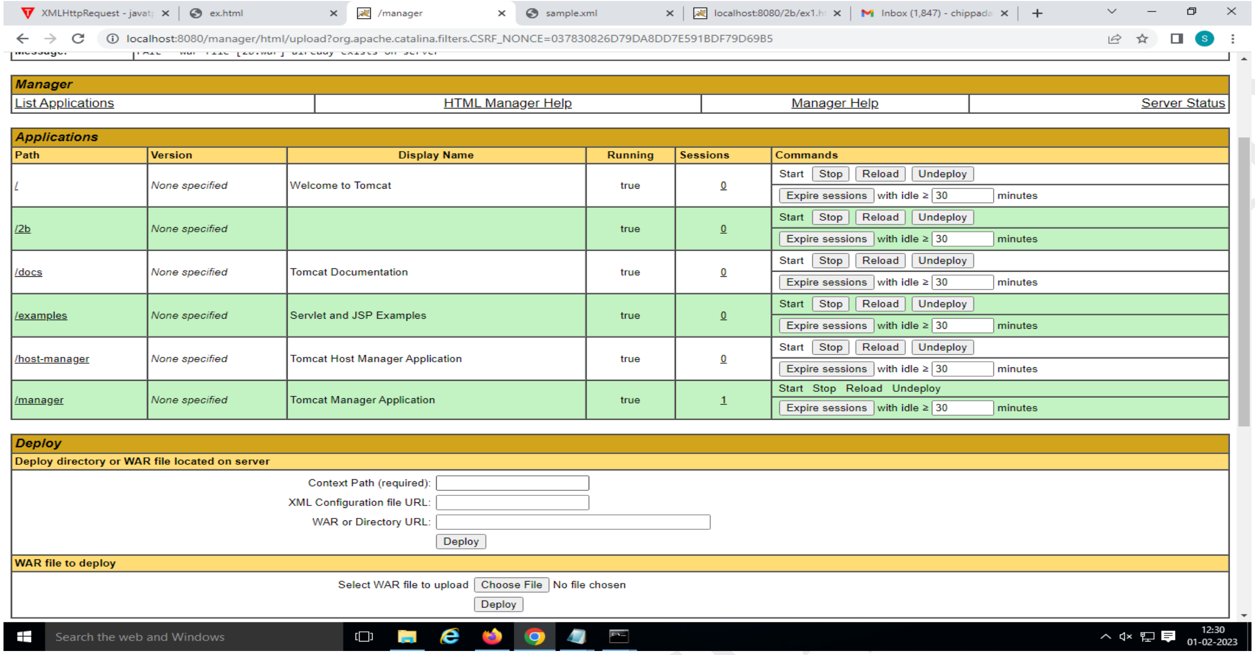

4.Choose war file and deploy it


XMLHttpRequest - javat
ex.html
/manager
sample.xml
localhost:8080/2b/ex1.h
Inbox (1,847) - chippada
localhost:8080/manager/html/upload?org.apache.catalina.filters.CSRF_NONCE=037830826D79DA8DD7E591BDF79D69B5

Manager			
List Applications	HTML Manager Help	Manager Help	Server Status

Applications

Path	Version	Display Name	Running	Sessions	Commands
/	None specified	Welcome to Tomcat	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/2b	None specified		true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/docs	None specified	Tomcat Documentation	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/examples	None specified	Servlet and JSP Examples	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/host-manager	None specified	Tomcat Host Manager Application	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/manager	None specified	Tomcat Manager Application	true	1	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes

Deploy

Deploy directory or WAR file located on server

Context Path (required):

XML Configuration file URL:

WAR or Directory URL:

Deploy

WAR file to deploy

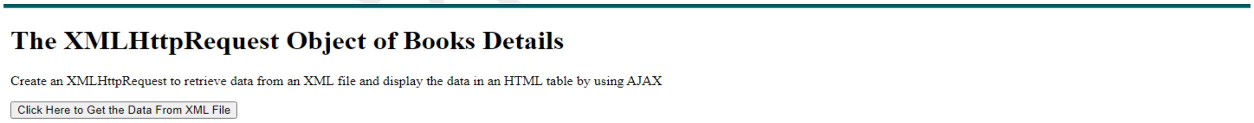
Select WAR file to upload Choose File No file chosen

Deploy

5:Execute the html files

http://172.16.10.31:8080/2b/ex1.html

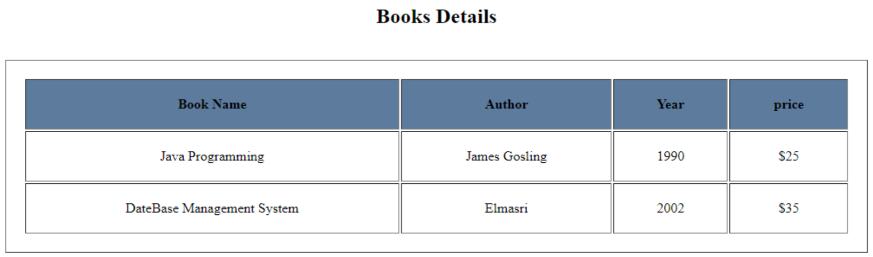
Output:



The XMLHttpRequest Object of Books Details

Create an XMLHttpRequest to retrieve data from an XML file and display the data in an HTML table by using AJAX

Click Here to Get the Data From XML File



Books Details

Book Name	Author	Year	price
Java Programming	James Gosling	1990	$25
DateBase Management System	Elmasri	2002	$35